

CLAIMS

1. A pan release composition, comprising:
from about 60 to about 100 weight percent of an interesterified structured lipid, based upon the total weight of the composition, said structured lipid being an interesterification reaction product of a reactant charge, said reactant charge having between about 25 and about 75 weight percent, based upon the total weight of the charge, of a medium chain triglyceride having fatty acid chains from C6 to C12 in length, reacted with between about 75 and about 25 weight percent, based upon the total weight of the charge, of a long chain edible oil having fatty acid chains of at least C16 in length; and
from 0 to about 30 weight percent of a modifier selected from the group consisting of a lecithin, a glyceride, and combinations thereof, based on the total weight of the composition.
2. The pan release composition in accordance with claim 1, further including from about 0 to about 30 weight percent, based upon the total weight of the composition, of a propellant for facilitating delivery by spraying of the pan release cooking composition.
3. The pan release composition in accordance with claim 1, wherein said structured lipid has a Brookfield viscosity at 20°C of between about 20 and about 52 centipoise.
4. The pan release composition in accordance with claim 1, wherein said structured lipid has a Brookfield viscosity at 20°C of between about 30 and about 50 centipoise.

5. The pan release composition in accordance with claim 1, wherein said structured lipid has a Brookfield viscosity at 20°C of between about 35 and about 48 centipoise.
6. The pan release composition in accordance with claim 1, wherein said structured lipid has a smoke point of at least about 195°C (at least about 383°F).
7. The pan release composition in accordance with claim 1, wherein said structured lipid has a smoke point of at least about 205°C (greater than about 400°F).
8. The pan release composition in accordance with claim 1, wherein said structured lipid has a smoke point of between about 196°C and about 221°C (between about 385°F and about 430°F).
9. The pan release composition in accordance with claim 1, wherein said structured lipid comprises at least about 85 percent by weight of the pan release composition, based upon the total weight of the composition, when propellant is not required.
10. The pan release composition in accordance with claim 1, wherein said structured lipid comprises between about 90 and about 98 percent by weight of the pan release composition, based upon the total weight of the composition, when propellant is not required.
11. The pan release composition in accordance with claim 1, wherein said structured lipid comprises between about 70 percent and about 97 percent by weight of the pan release composition, based upon the total weight of the composition.

12. The pan release composition in accordance with claim 1, wherein said medium chain triglyceride amount is between about 30 percent and about 60 percent by weight of the interesterification reactant charge, and the amount of the edible oil is between about 70 percent and about 40 percent by weight of the charge.
13. The pan release composition in accordance with claim 1, wherein said medium chain triglyceride amount is between about 35 percent and about 55 percent by weight of the interesterification charge, and the amount of the edible oil is between about 65 percent and about 45 percent by weight of the charge.
14. The pan release composition in accordance with claim 2, wherein said propellant is included in the composition at a level of at least about 10 percent by weight, based upon the total weight of the pan release composition.
15. The pan release composition in accordance with claim 2, wherein said propellant comprises a paraffin series hydrocarbon.
16. The pan release composition in accordance with claim 15, wherein said propellant is selected from the group consisting of propane, isobutane, and combinations thereof.
17. The pan release composition in accordance with claim 1, wherein said modifier is a lecithin component, and same is included at an amount of between about 0.5 percent and about 15 percent by weight, based upon the total weight of the pan release composition.

18. The pan release composition in accordance with claim 17, wherein said lecithin component is heat resistant lecithin.

19. The pan release composition in accordance with claim 1, wherein said modifier is a glyceride composition, and same is included at an amount of between about 0.5 percent and about 15 percent by weight, based upon the total weight of the pan release composition.

20. The pan release composition in accordance with claim 1, wherein said modifier is a combination of between about 0.5 percent and about 10 percent by weight, based upon the total weight of the total weight of the pan release composition, of a lecithin component and a phosphated mono and diglyceride component.

21. The pan release composition in accordance with claim 20, wherein said lecithin component is a heat resistant lecithin.

22. The pan release composition in accordance with claim 20, further including from about 0 to about 30 weight percent, based upon the total weight of the composition, of a propellant for facilitating delivery by spraying of the pan release cooking composition.

23. The pan release composition in accordance with claim 22, wherein said propellant is selected from the group consisting of propane, isobutane, and combinations thereof.

24. The pan release composition in accordance with claim 1, wherein said medium chain triglyceride is selected from the group consisting of caprylic triglyceride, capric triglyceride, and combinations thereof.

25. The pan release composition in accordance with claim 1, wherein said edible oil is selected from the group consisting of long chain triglycerides, soybean oil, corn oil, cottonseed oil, canola oil, olive oil, peanut oil, safflower oil, sunflower oil, oil from grain plants, palm oil, coconut oil, and combinations thereof.

26. A pan release composition, comprising:

from about 60 to about 100 weight percent of an interesterified structured lipid, based upon the total weight of the composition, said structured lipid being an interesterification reaction product of a reactant charge, said reactant charge having between about 25 and about 75 weight percent, based upon the total weight of the charge, of a medium chain triglyceride having fatty acid chains from C6 to C12 in length, reacted with between about 75 and about 25 weight percent, based upon the total weight of the charge, of a long chain edible oil having fatty acid chains of at least C16 in length;

optionally up to about 30 percent by weight of a modifier selected from the group consisting of a lecithin, a glyceride, and combinations thereof, based on the total weight of the composition; and

said pan release cooking composition is characterized by color darkening and residue build-up during cooking which is at least comparable to, and cleanability after cooking which is easier when compared with, pan release compositions not including said structured lipid containing pan release composition.

27. The pan release composition in accordance with claim 26, wherein said structured lipid has a smoke point of at least about 195°C (at least about 383°F).

28. The pan release composition in accordance with claim 26, wherein said structured lipid has a smoke point of at least about 205°C (greater than about 400°F).
29. The pan release composition in accordance with claim 26, wherein said medium chain triglyceride amount is between about 30 percent and about 60 percent by weight of the interesterification reactant charge, and the amount of the edible oil is between about 70 percent and about 40 percent by weight of the charge.
30. The pan release composition in accordance with claim 26, wherein said medium chain triglyceride amount is between about 35 percent and about 55 percent by weight of the interesterification reactant charge, and the amount of the edible oil is between about 65 percent and about 45 percent by weight of the charge.
31. The pan release composition in accordance with claim 26, further including between 0 and about 30 percent by weight of a propellant selected from the group consisting of propane, isobutane, and combinations thereof, based upon the total weight of the pan release composition.
32. The pan release composition in accordance with claim 26, further including up to about 20 percent by weight of a propellant, based upon the total weight of the composition, between about 0.5 and about 15 percent by weight of a lecithin modifier, based upon the total weight of the composition, and between about 0.5 and about 15 percent by weight of a glyceride modifier, based upon the total weight of the composition.

33. The pan release composition in accordance with claim 32, wherein said lecithin modifier is heat resistant lecithin.

34. The pan release composition in accordance with claim 26, wherein said medium chain triglyceride is selected from the group consisting of caprylic triglyceride, capric triglyceride, and combinations thereof, and wherein said edible oil is a domestic oil selected from the group consisting of soybean oil, corn oil, cottonseed oil, canola oil, olive oil, peanut oil, safflower oil, sunflower oil, oil from grain plants, and combinations thereof.

35. A method for controlling residue build-up and color darkening on cooking surfaces, utensils and containers during cooking and for easing cleaning thereof after cooking, comprising:

providing a medium chain triglyceride having a carbon chain length of between C6 and C12;

providing an edible oil having a carbon chain length of between C16 and C22;

introducing a reactant charge to a reaction location, the reactant charge including between about 25 percent and about 75 percent by weight of the medium chain triglyceride and between about 75 percent and about 25 percent by weight of said edible oil, based upon the total weight of the reactant charge;

interesterifing said reactant charge into an interesterified structured lipid;

preparing a pan release cooking composition comprising said interesterified structured lipid;

applying said pan release cooking composition to a cooking surface utensil or container;

cooking a food product with the cooking surface, utensil or container to which the pan release composition has been

applied, said cooking depositing low levels of residue and avoiding dark coloration; and

cleaning said cooking surface, utensil or container for removing any residue from said cooking.

36. The method in accordance with claim 35, wherein said pan release composition has a Brookfield viscosity at 20°C of between about 20 and about 52 centipoise.

37. The method in accordance with claim 35, wherein said pan release composition has a smoke point of at least about 195°C (at least about 383°F).

38. The method in accordance with claim 35, wherein said preparing comprises adding at least about 60 percent by weight of the structured lipid, based upon the total weight of the pan release composition.

39. The method in accordance with claim 38, wherein said preparing further includes adding up to about 15 percent by weight of a lecithin, based upon the total weight of the pan release composition.

40. The method in accordance with claim 38, wherein said preparing further includes adding up to about 15 percent by weight of glyceride, based upon the total weight of the pan release composition.

41. The method in accordance with 38, wherein said preparing further includes adding up to about 15 percent by weight of a heat resistant lecithin and up to about 15 percent by weight of a phosphated mono and diglyceride, both based upon the total weight of the pan release composition.

42. A method for using a medium chain triglyceride in a pan release cooking composition while avoiding high amounts and tenacity of residue build-up on cooking or baking containers and utensils, comprising:

providing a medium chain triglyceride having a carbon chain length of between C6 and C12;

providing an edible oil having a carbon chain length of between C16 and C22;

introducing a reactant charge to a reaction location, the reactant charge including between about 25 percent and about 75 percent by weight of the medium chain triglyceride and between about 75 percent and about 25 percent by weight of said edible oil, based upon the total weight of the reactant charge;

interesterifing said reactant charge into an interesterified structured lipid;

combining said interesterified structured lipid with at least one of a propellant, a lecithin and a glyceride to provide a pan release cooking composition;

spraying the pan release composition onto a cooking or baking container or utensil surface adapted to contact a food;

heating the cooking or baking container or utensil surface in contact with the food so as to cook or bake the food in the presence of the pan release cooking composition while avoiding high amounts of residue build-up; and

allowing cooling of the cooking or baking container or utensil and cleaning same under mild cleaning conditions.

43. The method in accordance with claim 42, wherein said combining comprises adding at least about 60 percent by weight of the structured lipid, based upon the total weight of the pan release composition, adding between 0 and about 15 percent by weight of a lecithin, based upon the total weight of the pan release composition and adding between 0 and about 15

percent by weight of a glyceride, based upon the total weight of the pan release composition.